



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,180	08/21/2003	Joseph Celi JR.	AUS920030375US1	7312
45371	7590	04/15/2008	EXAMINER	
IBM CORPORATION (RUS)			TRAN, TUYETLIEN T	
c/o Rudolf O Siegesmund Gordon & Rees, LLP			ART UNIT	PAPER NUMBER
2100 Ross Avenue			2179	
Suite 2800				
DALLAS, TX 75201				

MAIL DATE	DELIVERY MODE
04/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,180	CELI ET AL.	
	Examiner	Art Unit	
	TUYETLIEN T. TRAN	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 01 February 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,3-13,27,30-36,39 and 40 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1, 3-13, 27, 30-36, 39, 40 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. This action is responsive to the following communication: Amendment filed 2/01/08.

This action is made final.

2. Claims 1, 3-13, 27, 30-36, 39, 40 are pending in the case. Claims 1 and 27 are independent claims.

Claim Objections

3. Claim 27 is objected to because the term "computer-readable medium" is not defined in the specification. It is noted that amending the term "computer-readable medium" to "computer usable medium" would overcome this objection in a manner consistent with Applicant's specification filed on 03/12/2007.

4. Claims 4 and 31 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Appropriate correction is required.

5. Claim 39 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Note that claim 39 is dependent on a cancelled claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuli (Patent No US 6,941,382 B1; hereinafter Tuli_A).

As to claim 1, Tuli_A teaches:

A method for displaying a web page on a display screen (e.g., see Fig. 1 and col. 1 lines 29-40) comprising:

determining if the size of a web page is larger than a display screen (e.g., see col. 2 lines 34-38 and lines 54-63; note that in order for the server to divide the web page image into smaller portion that substantially or completely covers the displayable area of the palm device, the skilled artisan, having common knowledge and common sense, would realize that this determining step is included);

responsive to a determination that the web page is larger than the display screen, performing the steps (e.g., see col. 2 lines 38-47 and lines 54-63) comprising:

creating a web page bitmap image from a first web page displayed on a browser (e.g., translating html images into raster images or color images, see col. 2 lines 23-32; note that raster images are also referred to as bit map images, see col. 4 lines 55-56);

dividing the web page bitmap image into a plurality of fragments including a first web page bitmap image fragment and second web page bitmap image fragment (e.g., see Figs. 2, 3 and col. 2 lines 38-47);

displaying the first web page bitmap image fragment on the display screen (e.g., see Fig. 2);

Tuli_A does not expressly teach analyzing a HTML code for the first web page; however, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would reasonably be expected to draw the inference from the reference to include the feature of analyzing a HTML code for the first web page because Tuli_A suggests to

the skilled artisan that the translator program can translates the image such that words that represents links on the page 5 are translated to be slightly bolder (e.g., see col. 3 lines 3-10). Thus, the skilled artisan would realize that the HTML code is analyzed to identify hyperlinks contained within the web page image. Accordingly, one would be motivated to implement this feature to provide the ability to a user to interact with the web image on small display device just like the way that one can be able to interact with a normal web page.

Tuli_A does not expressly teach responsive to a determination that the web page is not larger than the display screen, displaying the unmodified web page. However, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would realize to include the feature of displaying the unmodified web page when the web page is not larger than the display screen because Tuli_A suggests to the skilled artisan that since web page images to be displayed in a browser window 6 are usually larger than the displayable area of the browser window 6, images are divided into smaller section to enhance the server's processing speed, data transfer and retrieval to and from the portable devices (see e.g., see col. 2 lines 34-47 and col. 1 lines 15-19). Accordingly, the skilled artisan would have recognized to display the unmodified web page if the web page is not larger than the display screen because such content is small enough that requires less data and processing power to generate. The desirability to implement this is to avoid the process of translation, division, compression, decompression; and thus, can increase the speed of processing (e.g., see col. 1 lines 15-19 and col. 2 lines 18-47).

As to claim 3, Tuli_A further teaches wherein the fragment is displayed at the web page's intended resolution (e.g., see Fig. 2 and col. 2 lines 54-63).

As to claim 4, the limitation recited in claim 4 is already addressed as set forth above in claim 1; therefore is rejected under similar rationale.

As to claim 5, Tuli_A further teaches:

recording a location of at least one hyperlink (e.g., col. 3 lines 3-10);

creating an image segment on an image map in the same location of the hyperlink (e.g., image words that represent links on the page 5 in Fig. 2 are translated to be slightly bolder, see col. 3 lines 3-10); and

wherein the image segment directs the user to another web page or location (e.g., see col. 3 lines 24-33).

As to claims 6, 7, Tuli_A further teaches calculating the number of x-axis or y-axis divisions (e.g., see Fig. 2; note that image 5 is divided into 2 x-axis and 2 y-axis divisions; further note in order for the server to divide the web page image into smaller portion that substantially or completely covers the displayable area of the palm device, the skilled artisan, having common knowledge and common sense, would realize that this calculating is included).

As to claim 8, Tuli_A further teaches:

determining if a user wants to navigate the web page image (e.g., see col. 2 lines 56-63); and

responsive to a determination that a user wants to navigate the web page image, running a navigation program (e.g., programs that causes other portions of the images to be displayed when the user scrolls up, down, or sideways to these parts of the image, see col. 2 lines 54-67).

As to claim 9, Tuli_A further teaches the displaying step occurs on a hand held display device (e.g., the information is received by a palm top device 12 in Fig. 1 is then decompressed and displayed in its display window 13, see col. 2 lines 54-57).

As to claim 12, Tuli_A further teaches wherein the web page image is identified by a unique identifier (e.g., a uniform resource identifier – URL - of a web page; as well-known in the art at the time the invention was made, URL is used to identify a web page from the internet or WWW, see col. 3 lines 24-35; thus, the skilled artisan, having common knowledge and common sense would realize that the web page image is also identified by a unique identifier so that the server knows exactly what information to send to the portable device).

As to claim 13, Tuli_A further teaches the web page image is stored in an image file ending in .gif, .jpg, or .bmp (e.g., see col. 4 lines 30-35).

8. Claims 27 and 30-36, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuli_A in view of Aoki et al. (Pub No US 2003/0016253 A1; hereinafter Aoki) and further in view of Tuli (Pub. No. US 2001/0028470 A1; hereinafter Tuli_B).

As to claim 27, Tuli_A teaches:

A computer program product encoded and stored on a computer readable medium (e.g., see Fig. 1, col. 1 lines 29-40 and col. 2 lines 56-62), the computer medium containing instructions for causing a computer to perform the steps comprising:
accessing a web page through a proxy (e.g., host computer 1 as shown in Fig. 1)
determining if the size of a web page is larger than a display screen (e.g., see col. 2 lines 34-38 and lines 54-63; note that in order for the server to divide the web page image into

smaller portion that substantially or completely covers the displayable area of the palm device, the skilled artisan, having common knowledge and common sense, would realize that this determining step is included);

responsive to a determination that the web page is larger than the display screen, performing the steps (e.g., see col. 2 lines 38-47 and lines 54-63) comprising:

creating a web page bitmap image from a first web page displayed on a browser (e.g., translating html images into raster images or color images, see col. 2 lines 23-32; note that raster images are also referred to as bit map images, see col. 4 lines 55-56) including a first hyperlink image of a first hyperlink on the first web page, the first hyperlink linking the first web page to a second web page (e.g., see col. 3 lines 6-10 and lines 24-33);

dividing the web page bitmap image into a plurality of fragments including a first web page bitmap image fragment and second web page bitmap image fragment (e.g., see Figs. 2, 3 and col. 2 lines 38-47);

wherein the step of dividing the web page bitmap image splits the first hyperlink image on the web page bitmap image into a first hyperlink segment on the first web page bitmap image fragment and a second hyperlink segment on the second web page bitmap image fragment (e.g., note that the image is further divided into smaller sections that are equal in size as shown in Fig. 2; see col. 3 lines 3-10; those skilled in the art, having common knowledge and common sense, would have realized that when the web page image is divided into equal sections, the URL that lies between the sections would be divided into the web page fragments accordingly);

displaying the first web page bitmap image fragment on the display screen (e.g., see Fig. 2);

Tuli_A does not expressly teach analyzing a HTML code for the first web page; however, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would reasonably be expected to draw the inference from the reference to include the feature of analyzing a HTML code for the first web page because Tuli_A suggests to the skilled artisan that the translator program can translates the image such that words that represents links on the page 5 are translated to be slightly bolder (e.g., see col. 3 lines 3-10). Thus, the skilled artisan would realize that the HTML code is analyzed to identify hyperlinks contained within the web page image. Accordingly, one would be motivated to implement this feature to provide the ability to a user to interact with the web image on small display device just like the way that one can be able to interact with a normal web page.

Tuli_A does not expressly teach responsive to a determination that the web page is not larger than the display screen, displaying the unmodified web page. However, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would realize to include the feature of displaying the unmodified web page when the web page is not larger than the display screen because Tuli_A suggests to the skilled artisan that since web page images to be displayed in a browser window 6 are usually larger than the displayable area of the browser window 6, images are divided into smaller section to enhance the server's processing speed, data transfer and retrieval to and from the portable devices (see e.g., see col. 2 lines 34-47 and col. 1 lines 15-19). Accordingly, the skilled artisan would have recognized to display the unmodified web page if the web page is not larger than the display screen because such content is small enough that requires less data and processing power to generate. The desirability to implement this is to avoid the process of translation, division, compression, decompression; and thus, can increase the speed of processing (e.g., see col. 1 lines 15-19 and col. 2 lines 18-47).

Although Tuli_A teaches that if the user clicks on a part of the image which represents a link, the browser will go to a new web page (e.g., see col. 1 lines 41-44 and col. 3 lines 24-30), Tuli_A does not expressly teach wherein when the user clicks on a pixel of the first hyperlink segment of the first web page bitmap image fragment, an image map instructs the browser to go to the second web page;

Aoki, though, teaches that image maps are a widely used technique allowing users to perform graphical selections of active areas within a displayed image map (e.g., see [0004]). Aoki suggests to a skilled artisan that:

when a user clicks on a pixel of a first web page bitmap image fragment/area, an image map instructs the browser to go to the second web page indicated by the web page hyperlink (e.g., image maps are formed by associating an image with hyperlink targets or active areas. When a user clicks on one of the hyperlink targets or active areas, the browser displays an additional hypertext document, see [0004]; further note that image map technology allows any image area to be associated with a hyperlink and that clicking on any pixel or part of the image area can activate the hyperlink);

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the image map technology as taught by Aoki to the method of displaying a webpage on a handheld device as taught by Tuli to associate the hyperlink segment with a web page hyperlink so that when the user clicks on the hyperlink segment, the browser will go to the second web page as claimed. The motivation is to provide the user of the portable device the ability to click on a hyperlink the same way the user could on a normal display device;

Although Tuli_A teaches that sections of a web page image are transmitted and displayed in the order of priority such that the priority fragment is transmitted and displayed first

(e.g., see col. 2 lines 56-60), Tuli_A and Aoki do not expressly teach that the proxy sends only one fragment to the hand held display device and that responsive to a request for another fragment, sending another fragment to the hand held display device.

Tuli_B, having the same inventive entity and same system structure, teaches only a portion of a web page image is sent from the host computer to the portable device to be displayed for view by a user (e.g., see [0021]). Tuli_B further teaches responsive to a request for another fragment, sending another fragment to the hand held display device (e.g., see [0022]). Tuli_B expressly discloses sending only the portion of the image that appears in the browser window to the remote device reduces the bandwidth considerably, and conserves on memory in the portable device, compared to sending the entire web page to be stored on the device (e.g., see [0022]).

Because Tuli_A teaches that sections of a web page image are transmitted and displayed in the order of priority such that the priority fragment is transmitted and displayed first (e.g., see col. 2 lines 56-60), it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the features of sending only one fragment to a hand held display device and sending another fragment to the hand held display device upon request in view of express suggestion in Tuli_B. The motivation is to reduce the bandwidth and conserve on memory in the portable device.

As to claim 30, claim 30 is in the same context as claim 3; therefore is rejected under similar rationale.

As to claim 31, the limitation recited in claim 31 is already addressed as set forth above in claim 27; therefore is rejected under similar rationale.

As to claim 32, Tuli_A further teaches:

recording a location of a second hyperlink (e.g., col. 3 lines 3-10);
creating an image segment on an image map in the same location of the second
hyperlink (e.g., image words that represent links on the page 5 in Fig. 2 are translated to be
slightly bolder, see col. 3 lines 3-10); and
wherein the image segment directs the user to another web page or location (e.g., see
col. 3 lines 24-33).

As to claims 33-36, 39 and 40, claims 33-36, 39 and 40 are in the same context as
claims 6-9, 12 and 13 respectively; therefore are rejected under similar rationale.

9. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuli_A in view of Tuli_B.

As to claims 10, 11, the limitations recited in claims 10 and 11 are already addressed
as set forth above in claim 27; therefore are rejected under similar rationale

Response to Arguments

10. Applicant's arguments filed on 02/01/2008 have been considered but are not persuasive.

I. In response to Applicant's remark that claim 1 is amended to incorporate features and
limitations from claim 2 and also amended to recite additional limitation "displaying the first web
page bit map image fragment on the display screen" (e.g., see Applicant's remark page 7,
paragraph 2), the examiner notes claim 1 is also amended to incorporate the features and
limitations from claim 4.

II. Applicant's argument that the prior art of Tuli_A does not teach the limitation "determining if the size of a web page is larger than a display screen" (e.g., see Applicant's remark page 8, paragraph 3).

In response, the examiner directs the Applicant to the fact that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In this case, the prior art of Tuli_A expressly teaches the web page image 5 to be displayed in a browser window 6 is usually larger than the displayable area of the browser window 6, the image 5 is divided into smaller sections; each of the smaller sections substantially or completely covers the displayable area of the portable device (e.g., see col. 2 lines 34-41 and lines 54-63). Clearly, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would reasonably be expected to draw the inference from the reference to recognize that in order for the server to divide the web page image into smaller portion that substantially or completely covers the displayable area of the palm device, the determining step "determining if the size of a web page is larger than a display screen" is included.

III. Applicant's argument that the prior art of Tuli_A does not teach the limitation "responsive to a determination that the web page is not larger than the display screen, displaying the web page unmodified on the display screen" (e.g., see Applicant's remark page 8, paragraph 4).

In response, the examiner again directs the Applicant to the fact that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to

draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In this case, the examiner admits that Tuli_A does not expressly teach responsive to a determination that the web page is not larger than the display screen, displaying the unmodified web page. However, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would reasonably be expected to draw the inference from the references to include the feature of displaying the unmodified web page when the web page is not larger than the display screen because Tuli_A suggests to the skilled artisan that since web page images to be displayed in a browser window 6 are usually larger than the displayable area of the browser window 6, images are divided into smaller section to enhance the server's processing speed, data transfer and retrieval to and from the portable devices (see e.g., see col. 2 lines 34-47 and col. 1 lines 15-19). Accordingly, the skilled artisan would have recognized to display the unmodified web page if the web page is not larger than the display screen because such content is small enough that requires less data and processing power to generate. The desirability to implement this is to avoid the process of translation, division, compression, decompression; and thus, can increase the speed of processing (e.g., see col. 1 lines 15-19 and col. 2 lines 18-47).

IV. In response to Applicant's arguments in regard to claims 10, 11 and 27, the cited prior art do not teach "the proxy sends only one fragment to the hand held display device and that responsive to a request for another fragment, sending another fragment to the hand held display device" (e.g., see Applicant's remark page 9, third paragraph through page 10, first paragraph; page 11, third paragraph through page 12, second paragraph), the examiner notes these limitations are clearly addressed as rejected supra.

V. Applicant's argument with respect to claims 12 and 39 that the prior art of Tuli_A does not teach the limitation "the web page image is identified by a unique identifier" (e.g., see Applicant's remark page 10, paragraph 2; page 12, paragraph 5 through page 13).

In response, the examiner again directs the Applicant to the fact that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In this case, the prior art of Tuli_A teaches a web page image fragment including a part of image which represents a link or hyperlink that references to a new web page from the Internet or WWW (e.g., see col. 3 lines 24-35). Clearly, the skilled artisan in the art at the time the invention was made, having common knowledge and common sense, would realize that the link's attribute "HREF" is used to point to a URL of a web page and URL (uniform resource identifier) is used to identify a web page from the Internet or WWW. For example, the link that has underlying tag: link includes the URL (e.g., http://www.USPTO.gov) of the USPTO web site and this USPTO URL is unique identifier. Therefore, the skilled artisan having common knowledge and common sense would realize that the web page image is also identified by a unique identifier so that the server knows exactly what information to send to the portable device.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2179

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275,277 (CCPA 1968)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00 (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2179

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TuyetLien T Tran/
Examiner, Art Unit 2179

/Weilun Lo/
Supervisory Patent Examiner, Art Unit 2179